Central obesity among European preschool children: The ToyBox-Study

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OBJECTIVE
To evaluate the distribution of WC measures among preschool children aged 3.5-5.5 years from six European countries.

Prevalence of overweight/obesity (%) according to demographic and SES data

- Waist circumference (WC):
  • reflects the fat distribution and the degree of central adiposity in children
  • is specifically associated with cardiovascular risk factors
  • is useful as a component of metabolic syndrome definition in children

Participants
- Cross-sectional baseline study of 7527 pre-school children from six European countries - Belgium, Bulgaria, Germany, Greece, Poland and Spain (www.toybox-study.eu)
- Mean age 4.74±0.44 years, 52.0% boys.
- The prevalence of overweight (OW) and obesity (OB) was defined according to the IOTF BMI criteria (Cole et al., 2000).

Methods
- Body weight, height and waist circumference (WC) were measured using standard procedures and medical equipment. BMI and waist-to-height ratio (WHtR) were calculated (Obes rev, S3, 2014).
- The prevalence of abdominal obesity (AO) – defined as WHtR values >0.5
- A standardized questionnaire was used to collect information on SES and demographic data.

ConCluSion
The ToyBox study adds data to our knowledge on abdominal obesity among preschoolers in Europe, highlighting the need to identify new strategies to decrease it.

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